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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,341	01/28/2002	Tatsushi Yamamoto	70868/56922	6144
21874	7590	01/07/2004	EXAMINER	
EDWARDS & ANGELL, LLP			VERSTEEG, STEVEN H	
P.O. BOX 9169			ART UNIT	
BOSTON, MA 02209			PAPER NUMBER	
			1753	

DATE MAILED: 01/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/058,341	Applicant(s) YAMAMOTO ET AL. 	
	Examiner Steven H VerSteeg	Art Unit 1753	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All   b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- |                                                                                              |                                                                             |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation feeding the cooling medium to "at least one corner of the backing plate and to at least a portion of the periphery of the backing plate such that a different level of cooling is achieved at the at least one corner than at the at least a portion of the periphery" in claim 1 is new matter; the limitation that "the level of cooling is higher at the at least one corner than at the at least a portion of the periphery" in claim 2 is new matter; and the limitation feeding a cooling medium to "at least one corner of a backing plate such that a different level of cooling is achieved at the at least one corner than at the at least a portion of the periphery" in claim 7 is new matter. The limitations could not be located in the specification as originally filed. Claims 2-6 depend from claim 1 and contain all of the limitations of claim 1. Therefore, claims 2-6 are rejected for the same reasons as claim 1.

*Claim Objections*

3. Claims 2-4 are objected to because of the following informalities: "the the" in claim 2 at lines 2-4 needs corrected. Claims 3 and 4 depend from claim 2 and contain all of the limitations of claim 2. Therefore, claims 3 and 4 are objected to for the same reasons as claim 2.

Appropriate correction is required.

*Response to Amendment*

4. The 112-first paragraph rejection of claim 2 presented in the office action mailed July 15, 2003 has been restated in light of the amendment. Applicant has directed me to page 25 at lines 17-25, but that location does not provide support for the limitations of claim 2 as amended or as previously presented. In fact, the quoted sections are not even found at the location provided by Applicant. Please check your page number and line numbers.

5. The 103(a) rejection of claims 1-6 over US 6,199,259 B1 to Demaray et al. (Demaray) in view of US 6,143,149 to Abe presented in the office action mailed July 15, 2003 is withdrawn in light of the amendment to claim 1 to require feeding the cooling medium to at least one corner of the backing plate and to at least a portion of the periphery of the backing plate such that a different level of cooling is achieved at the at least one corner than at the at least a portion of the periphery.

6. The 103(a) rejection of claims 1, 2, and 7 over US 6,143,149 to Abe in view of US 5,985,115 to Hartsough et al. (Hartsough) presented in the office action mailed July 15, 2003 is withdrawn in light of the amendment to claim 1 to require feeding the cooling medium to at least one corner of the backing plate and to at least a portion of the periphery of the backing plate such

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that a different level of cooling is achieved at the at least one corner than at the at least a portion of the periphery and the amendment to claim 7 to require feeding a cooling medium to at least one corner of the backing plate and to at least a portion of the periphery of the backing plate such that a different level of cooling is achieved at the at least one corner than at the at least a portion of the periphery.

### *General Information*

For general status inquiries on applications not having received a first action on the merits, please contact the Technology Center 1700 receptionist at (703) 308-0661.

For inquiries involving Recovery of lost papers & cases, sending out missing papers, resetting shortened statutory periods, or for restarting the shortened statutory period for response, please contact Palestine Jenkins at (571) 272-1021.

For general inquiries such as fees, hours of operation, and employee location, please contact the Technology Center 1700 receptionist at (703) 308-0661.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven H VerSteeg whose telephone number is (571) 272-1348. The examiner can normally be reached on Mon - Thurs (7:30 AM - 6:00 PM).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1300.



Steven H VerSteeg  
Primary Examiner  
Art Unit 1753

shv  
December 22, 2003